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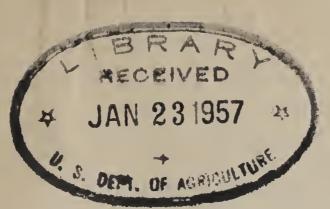
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United States Department of Agriculture,

BUREAU OF CHEMISTRY.

STANDARDS OF PURITY FOR FOOD PRODUCTS.

Preliminary draft submitted as a basis for suggestion.

[Prepared by the Committee on Food Standards, Association of Official Agricultural Chemists.]

PRINCIPLES ON WHICH THE STANDARDS ARE BASED.

The general considerations which have guided the committee in preparing the standards for food products are the following:

- 1. The standards are expressed in the form of definitions, with or without accompanying specifications of limit in composition.
- 2. The main classes of food articles are defined before the subordinate classes are considered.
- 3. The definitions are so framed as to exclude from the articles defined substances not included in the definitions.
- 4. The definitions include, where possible, those qualities which make the articles described wholesome for human food.
- 5. A term defined in any of the several schedules has the same meaning wherever else it is used in this report.
- 6. The names of food products herein defined usually agree with existing American trade or manufacturing usage, but where such usage is not clearly established or where trade names confuse two or more articles for which specific designations are desirable, preference is given to one of the several trade names applied.
- 7. Standards are based upon data representing materials produced under American conditions and manufactured by American processes or representing such varieties of foreign articles as are chiefly imported for American use.
- 8. The standards fixed are such that a departure of the articles to which they apply, above the maximum or below the minimum limit prescribed, is evidence that such articles are of inferior or abnormal quality.
- 9. The limits fixed as standard are not necessarily the extremes authentically recorded for the article in question, because such extremes are commonly due to abnormal conditions of production and are usually accompanied by marks of inferiority or abnormality readily perceived by the producer or manufacturer.

FOOD STANDARDS.

II. VEGETABLE PRODUCTS.

- B. FRUITS AND VEGETABLES.
- a. FRUITS AND FRUIT PRODUCTS.

(Except fruit juices-fresh, sweet, and fermented-and vinegars.)

- 1. Dried fruit is the clean, sound product made by drying in the sun sound, mature, properly prepared fruit. It conforms in name to the fruit used in its preparation.
- 2. Evaporated fruit is the clean, sound product made by drying on wooden trays or frames, by artificial heat, sound, mature, properly prepared fruit. It conforms in name to the fruit used in its preparation.
- 3. Evaporated apples are evaporated fruit, made from any variety of apples, freed from core and skin, and contain not more than twenty-seven (27) per cent of moisture.
- 4. Canned fruit is the sound product made by sterilizing clean, sound, mature, properly prepared fresh fruit by heating, with or without sugar (sucrose) sirup, and keeping in hermetically sealed vessels, which, while sealed, yield no metallic substance to the fruit juice. It conforms in name to the fruit used in its preparation.
- 5. Preserve is the sound product made by adding clean, sound, mature, properly prepared fresh fruit to a hot, thick sugar (sucrose) sirup and boiling. It conforms in name to that of the fruit used in its preparation and contains not more than fifty-five (55) per cent of sugars.
- 6. Jam (marmalade) is the sound product made by boiling clean, sound, mature, properly prepared fresh fruit in water with sugar (sucrose) and reducing the whole to a pulpy consistence. Jam contains not more than fifty-five (55) per cent of sugars and conforms in name to the fruit used in its preparation.
- 7. Currant, raspberry, blackberry, and gooseberry jams are jams made from the whole fruit of these respective species after a preparation including the removal of the stem and withered calyx.
 - 8. Grape jam is jam made from the grape, freed from stems and seeds.
- 9. Apple, pear, peach, and apricot jams are jams made from these respective fruits freed from skin and, in the case of apple and pear jams, from the core.
- 10. Quince jam is jam containing the pulp of the fruit together with the evaporated extract made by boiling the cores and parings with water and straining.
- 11. Fruit butter is the sound product made by concentrating fruit juice, adding clean, sound, mature, properly prepared fruit and evaporating to a semisolid mass of homogeneous consistence, with or without the addition of spices. It conforms in name to the fruit used in its preparation.
- 12. Jelly is the sound product made from the juice of clean, sound, mature, and properly prepared fresh fruit, to which sugar (sucrose) has been added and which has been concentrated until on cooling and standing it forms a semisolid gelatinous mass. It conforms in name to the fruit used in its preparation.

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- 13. Current jelly is jelly made from red, white, or black currants, with or without the stems.
- 14. Apple jelly and quince jelly are jellies made from the juice of the whole of these respective fruits or from the juice of the peeled and cored fruit.

D. Condiments (except vinegar).

b. FLAVORING EXTRACTS.

- 1. Flavoring extracts are ethyl alcohol solutions of the sapid and odorous principles with or without the coloring matters of aromatic plants or parts of plants, used for flavoring food; and are derived from the plants whose names they bear.
- 2. Almond extract is the solution made by dissolving oil of bitter almonds, a free from hydrocyanic acid, in alcohol (ethyl) and water, and contains not less than nine (9) per cent by weight of oil of bitter almonds, and not less than sixty-five (65) per cent by weight of ethyl alcohol.
- ^aOil of bitter almonds is the volatile oil obtained from the press cake from the seeds of the bitter almond (Amygdalus communis L.), apricot (Prunus armeniaca L.), or peach (Amygdalus persica L.) by maceration with water and subsequent distillation.
- 3. Anise extract is the solution made by dissolving oil of anise a in deodorized alcohol (ethyl), and contains not less than eleven (11) per cent by weight of oil of anise, and not less than eighty (80) per cent by weight of ethyl alcohol.
- a Oil of anise is the volatile oil obtained by the distillation of anise with water.
- 4. Cardamom extract is the solution made by macerating and percolating powdered cardamoms^a with diluted alcohol (ethyl) and contains not less than three (3) per cent by weight of the volatile oil of cardamoms, and not less than forty (40) per cent by weight of ethyl alcohol.
- ^aCardamoms are the dried, ripe seeds of the Malabar Cardamom, Elettaria cardamomum (L.) Maton.
- 5. Celery seed extract is the solution made by the percolation of bruised celery seed with diluted alcohol (ethyl), and contains not less than two (2) per cent by weight of the volatile oil of celery seed and not less than forty (40) per cent by weight of ethyl alcohol.
- 6. Cinnamon extract is the solution made by dissolving oil of cinnamon in alcohol (ethyl), and contains not less than eleven (11) per cent by weight of oil of cinnamon and not less than seventy-eight (78) per cent by weight of ethyl alcohol.
- ^aOil of cinnamon is the volatile oil obtained by the distillation of cassia or cinnamon with water.
- 7. Coriander extract is the solution made by the maceration and subsequent percolation of bruised coriander a with a solution of oil of coriander in alcohol (ethyl), and contains not less than four-tenths (0.4) per cent by weight of oil of coriander and not less than seventy-five (75) per cent by weight of ethyl alcohol.
- " Coriander is the dried, ripe fruit of Coriandrum sativum L.
- b Oil of coriander is the volatile oil obtained from coriander by distillation.
- 8. Ginger extract is the solution made by the maceration and percolation of ground Jamaica ginger with alcohol (ethyl), and contains in one hundred (100) cubic centimeters the extractive matters from two hundred (200) grams of Jamaica ginger and not less than eighty-eight (88) per cent by weight of ethyl alcohol.

- 9. Lemon extract is the solution made by macerating lemon peel with a solution of oil of lemon^a in deodorized alcohol (ethyl) and subsequently filtering, and contains not less than four and one-half (4.5) per cent by weight of oil of lemon and not less than eighty-five (85) per cent by weight of ethyl alcohol.
- ^a Oil of lemon is the volatile oil expressed from the fresh peel of the lemon, Citrus limon L.
- 10. Nutmeg extract is the solution made by dissolving oil of nutmeg n in alcohol (ethyl), and contains not less than four and three-fourths (4.75) per cent by weight of oil of nutmeg and not less than eighty-eight (88) per cent by weight of ethyl alcohol.
- a Oil of nutmeg is the volatile oil distilled from nutmegs.
- 11. Orange extract is the solution made by dissolving oil of orange peel in deodorized alcohol (ethyl), and contains not less than four and three-fourths (4.75) per cent by weight of oil of orange peel and not less than eighty-eight (88) per cent by weight of ethyl alcohol.
- ^a Oil of orange peel is the volatile oil expressed from the fresh peel of the sweet orange, Citrus aurantium L.
- 12. Peppermint extract is the solution made by macerating bruised peppermint^a in a solution of oil of peppermint^b in alcohol (ethyl) and subsequently filtering, and contains not less than ten (10) per cent by weight of oil of peppermint and not less than eighty (80) per cent by weight of ethyl alcohol.
- ^a Peppermint is the leaves and top of Mentha piperita L.
- b Oil of peppermint is the volatile oil distilled from peppermint.
- 13. Rose extract is the solution made by macerating red rose leaves in a solution of otto of roses in deodorized alcohol (ethyl) and subsequent filtering, and contains not less than three-tenths (0.3) per cent by weight of otto of roses, and not less than eighty-seven (87) per cent by weight of ethyl alcohol.
- ^a Otto of roses is the volatile oil distilled from the petals of Rosa damascena Miller.
- 14. Savory extract, summer savory extract, is the solution made by percolating savory with dilute alcohol (ethyl), and contains not less than fifteen-hundredths (0.15) per cent by weight of oil of savory, and not less than thirty-five (35) per cent by weight of alcohol.
- 15. Spearmint extract is the solution made by macerating bruised spearmint a in a solution of oil of spearmint in alcohol (ethyl) and subsequently filtering, and contains not less than ten (10) per cent by weight of oil of spearmint, and not less than eighty (80) per cent by weight of ethyl alcohol.
- a Spearmint is the leaves and top of Mentha spicata L.
- b Oil of spearmint is the volatile oil distilled from spearmint.
- 16. Sweet basil extract is the solution made by percolating sweet basil with dilute alcohol (ethyl), and contains not less than three-hundredths (0.03) per cent by weight of oil of sweet basil, and not less than thirty-five (35) per cent by weight of ethyl alcohol.
- ^a Sweet basil, or basil, is the leaves and top of Ocimum basilicum L.
- 17. Sweet marjoram extract, marjoram extract, is the solution made by percolating marjoram with dilute alcohol (ethyl), and contains not less than three-tenths (0.3) per cent by weight of oil of marjoram, and not less than thirty-five (35) per cent by weight of ethyl alcohol.
- 18. Thyme extract is the solution made by percolating thyme with dilute alcohol (ethyl), and contains not less than nine-tenths (0.9) per cent by weight

of oil of thyme and not less than thirty-five (35) per cent by weight of ethyl alcohol.

- 19. Tonka extract is the solution made by macerating and subsequently percolating tonka beans a and sugar with ethyl alcohol and water, and contains not less than one-tenth (0.10) per cent of coumarin derived from tonka beans, and not less than thirty (30) per cent by weight of ethyl alcohol.
- ^a Tonka bean is the seed of Coumarouna odorata Aublet (Dipteryx odorata (Aubl.) Willd.).
- 20. Vanilla extract is the solution made by macerating and subsequently percolating vanilla beans, previously triturated with sugar (sucrose), with alcohol (ethyl), and contains not less than five-hundredths (0.05) per cent of vanillin derived from the vanilla bean, together with the gums, resins, and other extractive matters characteristic of the vanilla bean and extracted therefrom in the course of the above-mentioned process of manufacture, and not less than thirty-five (35) per cent by weight of ethyl alcohol.
- a Vanilla bean is the dried, cured fruit of Vanilla planifolia Andrews.
- 21. Wintergreen extract is the solution made by dissolving oil of wintergreen a in alcohol (ethyl), and contains not less than six (6) per cent by weight of oil of wintergreen and not less than eighty-two (82) per cent by weight of ethyl alcohol.
- ^a Oil of wintergreen is the volatile oil distilled from the leaves of Gaultheria procumbens L., or the bark of Betula lenta L.

C. SALAD OILS.

- 1. Olive oil is the oil extracted by pressure from the sound mature fruit of the cultivated olive tree, Olea europea L., and subjected to the usual refining process; it is free from rancidity, and contains in one hundred (100) cubic centimeters not more than five (5) grams of free fatty acid, and has an iodin number not exceeding eighty-eight (88).
- 2. Virgin olive oil or superfine virgin olive oil is olive oil obtained from the first pressing of carefully selected, hand-picked olives.
- 3. Cotton seed oil is the oil obtained by pressure from the seeds of cotton plants, Gossypium hirsutum L., G. barbadense L., and G. herbaceum L., and subjected to the usual processes of refining; it is free from rancidity, contains in one hundred (100) cubic centimeters not more than three (3) grams of free fatty acids, and has an iodin number not exceeding one hundred and ten (110).
- 4. "Winter-pressed" cotton seed oil is cotton seed oil from which a portion of the stearin has been separated by chilling and pressure.
- 5. Peanut oil, arachis oil, earth nut oil, is the oil extracted by pressure from the peanut, Arachis hypogaca L., and subjected to the usual refining processes; it is free from rancidity, contains in one hundred (100) cubic centimeters not more than three (3) grams of free fatty acids, and has an iodin number not exceeding one hundred (100).
 - 6. "Cold-drawn" peanut oil is peanut oil extracted without heating.
- 7. Sesame oil, gingli oil, teel oil is the oil extracted by pressure from the seeds of the sesame plant, Sesamum orientale L., and subjected to the usual refining processes; it is free from rancidity, contains in one hundred (100) cubic centimeters not more than three (3) grams of free fatty acids, and has an iodin number not exceeding one hundred and seven (107).

- 8. "Cold-drawn" sesame oil is sesame oil extracted without heating.
- 9. Poppy seed oil is the oil extracted by pressure from the seed of the poppy, Papaver somniferum L., and subjected to the usual refining processes; it is free from rancidity, contains in one hundred (100) cubic centimeters not more than three (3) grams of free fatty acids, and has an iodin number not exceeding eighty-eight (88).
- 10. White poppy seed oil, "cold drawn" poppy seed oil, is poppy seed oil of the first pressing without heating.
- 11. Palm nut oil is the oil extracted by pressure from the fruit kernels of the African oil palm, Elaeis guineensis Jacq., and subjected to the usual refining processes; it is free from rancidity, and contains in one hundred (100) cubic centimeters not more than three (3) grams of free fatty acids. It maintains its oily consistence only at temperatures above thirty-two (32) degrees Centigrade.
- 12. Coconut oil is the oil extracted by pressure from the kernels of the coconut, Cocos nucifera L., and subjected to the usual refining processes; it is free from rancidity, and contains in one hundred (100) cubic centimeters not more than (3) grams of free fatty acids. Coconut oil assumes an oily consistence only above twenty-five (25) degrees Centigrade.
 - 13. Cochin oil is coconut oil of the first quality prepared in Cochin (Malabar).
 - 14. Ceylon oil is coconut oil prepared in Ceylon.
- 15. Coprah oil is coconut oil prepared from coprah, the dried kernels of the coconut.
- 16. Rape seed oil, colza oil, is the oil extracted by pressure from the seeds of the rape plant, Brassica napus L., and subjected to the usual refining processes; it is free from rancidity, contains in one hundred (100) cubic centimeters not more than three (3) grams of free fatty acids, and has an iodin number not exceeding one hundred and four (104).
- 17. "Cold drawn" rape seed oil is rape seed oil extracted by the first pressure without heating.
- 18. Sunflower oil is the oil extracted by pressure from the seeds of the sunflower, Helianthus annuus L., and subjected to the usual refining processes; it is free from rancidity, and contains in one hundred (100) cubic centimeters not more than three (3) grams of free fatty acids.
- 19. "Cold drawn" sunflower oil is sunflower oil extracted by the first pressing and without heating.
- 20. Maize oil, corn oil, is the oil extracted by pressure from the germ of the maize grain, Zea mays L., and subjected to the usual refining processes; it is free from rancidity, and contains in one hundred (100) cubic centimeters not more than three (3) grams of free fatty acids.

III. PRESERVATIVES AND COLORING MATTERS.

A. SALT.

1. Table salt, dairy salt, factory-filled salt, is the product made by recrystallizing crude salt, and contains, on a water-free basis, not more than four-tenths (0.4) per cent of calcium and magnesium chlorids.

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